

It is claimed:

1. A plastic shipping or storage container comprising a polymeric composition including

- a) one or more of polyolefin resins or blends thereof, and
- b) one or more of thermosetting resins,

said plastic shipping and storage container further comprising an effective amount of a friction material on at least one surface, thereof.

2. The plastic container according to claim 1 further comprising an effective amount of one or more of performance enhancement additives selected from the group consisting of flame retardants, antimicrobial additives, mildewcides, foaming agents, and fillers.

3. The plastic container according to claim 1 further comprising RFID tags.

4. The plastic container according to claim 2 that meets the requirements of Underwriters Laboratories (UL) 2335 protocol for shipping containers.

5. The plastic container according to claim 1 wherein said polymeric composition comprises

- a) 1 to 49 parts by weight of a curable thermosetting resin, the parts by weight being based on the total composition, and
- b) 51 to 99 parts by weight of at least one of a fully prepolymerized uncrosslinked hydrocarbon polyolefin resin and a fully prepolymerized uncrosslinked functionalized polyolefin resin, the parts by weight being based on the total composition, wherein said hydrocarbon polyolefin is present in the range of 25 to 99 parts by weight of the total composition and said functionalized polyolefin is present in the range of 0 to 50 parts by weight of the total composition.

6. The plastic container according to claim 5 wherein said uncrosslinked prepolymerized polyolefin resin is selected from the group consisting of homopolymers, copolymers, blends with other polyolefins, blends with high impact polymers and blends with rubbers or elastomers.

7. The plastic container according to claim 2 wherein said performance enhancement additives are present in the range of more than 0 to 70 parts by weight of the weight of the total composition.

8. The plastic container according to claim 1 which is a shipping or storage pallet optionally having an open deck design.

9. The plastic container according to claim 1 wherein said thermosetting resin is selected from the group consisting of epoxy, curable polyolefins, ethylene propylene rubber, ethylene butylene rubber, phenolics, polyurethanes, unsaturated polyesters, furan, allyls, vinyls, silicones, alkyds, nitrile rubber, and functionalized rubber.

10. The plastic container according to claim 9 wherein said thermosetting resin is an epoxy resin.

11. The plastic container according to claim 1 wherein said polyolefin resin is selected from the group consisting of alpha-olefins, copolymers of said alpha-olefins, and functionalized polyolefins wherein the functionalized groups include one or more of O, N, S, and P atoms.

12. The plastic container according to claim 1 wherein said polymeric composition further comprises at least one of a photoactivatable catalyst and a thermal curing agent.

13. The plastic container according to claim 12 wherein said photocatalyst is selected from the group consisting of an onium salt photoinitiator and a cationic organometallic complex salt.

14. The plastic container according to claim 12 wherein said thermal curing agent is selected from the group consisting of aliphatic or aromatic primary, secondary, or tertiary amines, boron trifluoride complexes, imidazoles, hydrazines, and guanidines.

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15. The plastic container according to claim 1 wherein said polymeric composition comprises a foamed structure.

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16. The plastic container according to claim 1 wherein said polymeric composition is cured.

17. The cured composition according to claim 16 which is a semi-interpenetrating polymer network.

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18. A curable polymeric composition comprising
- a) a polyolefin resin or blends thereof,
 - b) a thermosetting resin, and
 - c) an effective amount of a flame retardant.

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19. A method for producing a plastic shipping or storage container comprising the steps:

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- a) admixing a composition comprising
 - (1) one or more thermosetting resins and one or more curing agents therefor,
 - (2) a fully pre-polymerized uncrosslinked hydrocarbon polyolefin resin, and optionally a fully pre-polymerized uncrosslinked functionalized polyolefin, and
- b) exposing said composition to curing conditions after forming the composition into a shipping or storage container.

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20. The method according to claim 19 wherein said composition comprises a foamed structure.

21. A method comprising the steps of a) providing a molten mixture including a curable epoxy resin, an effective amount of a curative for the curable epoxy resin, said curative being stable at temperature of mixing, and at least one of a fully prepolymerized uncrosslinked hydrocarbon polyolefin resin and a fully prepolymerized uncrosslinked functionalized polyolefin resin, and an effective amount of a flame retardant, b) applying the mixture to a substrate, mold, or storage vessel, or processing into a free-standing film, and c) at any subsequent time, activating the curative to produce a semi-interpenetrating polymer network.

22. The method according to claim 21 wherein said molten mixture further comprises an effective amount of one or more performance enhancement additives selected from the group consisting of antimicrobials, mildewcides, foaming agents, and fillers.

23. The method according to claim 21 wherein application of said molten mixture to said mold is preceded by in-mold application of friction material.